

Office of Chief Counsel
Internal Revenue Service

memorandum

CC: [REDACTED]: POSTF-157902-01
[REDACTED]

date: FEB - 5 2002

to: [REDACTED] and [REDACTED], Petroleum Engineers
Group [REDACTED], [REDACTED]

from: Associate Area Counsel, LMSB ([REDACTED]), CC: [REDACTED]

subject: [REDACTED] AND SUBSIDIARIES - ENHANCED OIL RECOVERY CREDIT

DISCLOSURE STATEMENT

THIS WRITING MAY CONTAIN PRIVILEGED INFORMATION. ANY UNAUTHORIZED DISCLOSURE OF THIS WRITING MAY HAVE AN ADVERSE AFFECT ON PRIVILEGES, SUCH AS THE ATTORNEY-CLIENT PRIVILEGE. IF DISCLOSURE BECOMES NECESSARY, PLEASE CONTACT THIS OFFICE FOR OUR VIEWS.

BACKGROUND

This memorandum responds to your request for advice concerning certain Enhanced Oil Recovery credits claimed by [REDACTED] and Subsidiaries (the "taxpayer" or "[REDACTED]") under Internal Revenue Code ("I.R.C.") § 43. Specifically, in [REDACTED], [REDACTED] filed claims for Enhanced Oil Recovery credits relating to [REDACTED] projects undertaken in its [REDACTED] tax year. Also in [REDACTED], [REDACTED] filed both its petroleum engineer's certifications relating to these projects and its operator's continued certifications for [REDACTED] through [REDACTED]. The claimed credits total in the [REDACTED] of dollars.

As discussed below, to qualify for the I.R.C. § 43 credit, a project must be a "qualified enhanced oil recovery project" under I.R.C. § 43(c)(2) and Treas. Reg. § 1.43-2. One requirement is that the first injection of liquids, gases, or other matter for the project occur after December 31, 1990 (*i.e.*, the project must not be "pre-existing"). Treas. Reg. § 1.43-2(a)(3). However, the regulations provide a "significant expansion exception" for certain pre-existing projects. Treas. Reg. § 1.43-2(d). In addition, a project must be certified under Treas. Reg. § 1.43-3.

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The following memorandum first addresses the technical requirements of the "significant expansion exception." The memorandum then discusses the certification requirements, essentially a substantiation issue. As discussed below, we conclude that [REDACTED] has not satisfied these requirements and, therefore, does not qualify for the I.R.C. § 43 credits for the projects in question.

ISSUES

1. Has [REDACTED] satisfied the "substantially unaffected reservoir volume" requirement of Treas. Reg. § 1.43-2(d)(2) for purposes of claiming the Enhanced Oil Recovery credits for the projects at issue?
2. Must [REDACTED] request a private letter ruling to qualify for the "change in tertiary recovery method" exception contained in Treas. Reg. § 1.43-2(d)(4) for the projects at issue?
3. Has [REDACTED] satisfied the certification requirements, i.e., has [REDACTED] provided the requisite substantiation, under Treas. Reg. § 1.43-3 for the projects at issue?

FACTS

The Enhanced Oil Recovery credits relate to steam injection projects in [REDACTED]. The relevant projects were active prior to December 31, 1990 (hereinafter referred to as "pre-existing projects") and were continuously active throughout the claim years. The claimed credits relate to new projects, to projects characterized by the taxpayer as significant expansions of preexisting projects, and to preexisting projects involving changes in tertiary recovery methods (such as a change from cyclical steam flooding to continuous steam flooding for pre-existing projects which have not been terminated for more than 36 months). The majority of the claims involve the significant expansion exception. The Service's Examination Team has determined that the taxpayer has no qualified new projects or significant expansions. Per your request, this memorandum focuses on the pre-existing projects involving significant expansions.

As discussed below, a significant expansion occurs if the injection of liquids, gases, or other matter after December 31, 1990, is reasonably expected to result in more than an insignificant increase in the amount of crude oil that ultimately will be recovered from reservoir volume that was substantially unaffected by the injection before January 1, 1991. Treas. Reg. § 1.43(d)(2). [REDACTED] never prepared economic

calculations, including cash flow and present value projections, providing the final justification for the project. However, [REDACTED] did provide projections of steam injection and oil production from stimulation of the entire project reservoir volume over the life of the project.

The taxpayer claims that, in the case of existing steam floods (steam drives), the oil produced since 1991 would not have been produced if the projects had been shut in. The taxpayer further claims that this oil is from substantially unaffected reservoir volumes. The taxpayer states that for existing cyclical steam injection wells, each successive cycle affects substantially unaffected reservoir volumes. Therefore, according to the taxpayer, such wells would qualify for the I.R.C. § 43 credit under the significant expansion exception.

The Examination Team has determined that the taxpayer failed to substantiate, in the certifications or otherwise, its entitlement to the credits. As to the implementation and operation phases, the certifications merely state that:

- (1) the tertiary recovery method is a continuous steam drive;
- (2) the first injection of steam occurred on [REDACTED]
- (3) the project is a significant expansion of a prior project in that it involves reservoir volume substantially unaffected by previous tertiary activity; and
- (4) the implementation of the project consists of the continuous injection of steam into approximately [REDACTED] patterns in the relevant reservoir within a certain area's physical limits.

In addition, a certification for one project states that cumulative production as of [REDACTED] for the project area was [REDACTED] barrels of oil. All of the certifications provide data on reserve estimates as of [REDACTED] as well as production histories and forecasts. However, this information fails to establish if the "significant expansion projects" will result in the recovery of more crude oil than that recoverable by a continuation of the previous tertiary activities.

[REDACTED] claims that although its records are incomplete, it has furnished the best available information. The taxpayer also maintains that its substantiation is adequate. Characterizing

its projects as not "usual", [REDACTED] asserts that it does not possess project plans and the voluminous engineering and financial analysis/reporting generally accompanying projects. The Examination Team notes that crucial information is missing, including maps, cross-sections, and reservoir temperature survey results. This missing information normally helps delineate both the reservoir volume from which the ultimate recovery will be increased as well as the reservoir volume affected by the prior project. The regulations, discussed below, require such delineations. The taxpayer has declined to assign its geologists and engineers to provide the missing documentation despite the size of the claimed credits.

DISCUSSION

To qualify for the credit, a project must be a "qualified enhanced oil recovery project" under I.R.C. § 43(c)(2) and Treas. Reg. § 1.43-2. I.R.C. § 43(c)(2)(A) defines a "qualified enhanced oil recovery project" as any project:

(i) which involves the application (in accordance with sound engineering principles) of 1 or more tertiary recovery methods ... which can reasonably be expected to result in more than an insignificant increase in the amount of crude oil which will ultimately be recovered;

(ii) which is located within the United States ...;
and

(iii) with respect to which the first injection of liquids, gases, or other matter commences after December 31, 1990.

Although I.R.C. § 43(c)(2)(A)(iii) and Treas. Reg. § 1.43-2(a)(3) require that the first injection of liquids, gases, or other matter occur after December 31, 1990, Treas. Reg. § 1.43-2(d) provides a "significant expansion exception" for certain projects already existing on that date. Specifically, if a project for which the first injection of liquids, gases, or other matter occurred before January 1, 1991, is significantly expanded after December 31, 1990, the expansion is treated as a separate project for which the first injection occurs after December 31, 1990. Treas. Reg. § 1.43-2(d)(1).

Substantially Unaffected Reservoir Volume:

At the heart of the instant matter lies the "substantially unaffected reservoir volume" rule. Treas. Reg. § 1.43-2(d)(2) provides that:

A project is considered significantly expanded if the injection of liquids, gases, or other matter after December 31, 1990, is reasonably expected to result in more than an insignificant increase in the amount of crude oil that ultimately will be recovered from reservoir volume that was substantially unaffected by the injection of liquids, gases, or other matter before January 1, 1991.

The Examination Team believes that the term "substantially unaffected reservoir volume" refers to acreage already included in a project, so that acreage already included in a project cannot qualify as significantly expanded. [REDACTED], on the other hand, argues that a project may qualify for the "significant expansion exception" even if it includes expansion of a pre-existing project on the same acreage already affected by the project. More specifically, [REDACTED] argues that the area of the project not substantially affected (in this case, not yet heated up) should be treated as a new project and, therefore, qualify for the credit. The Service, in contrast, argues that such project area does not qualify as a new project even though a portion of it is not yet heated up.

No administrative pronouncements, including private letter rulings, field service advice memoranda, technical advice memoranda or revenue rulings, clarify this issue.¹ However, the legislative history to I.R.C. § 43 sheds some light. It states that:

A significant expansion of any project is to be treated as a separate project. A project will be considered significantly expanded if tertiary activities are taken to recover oil from areas not substantially affected by the project's previously implemented tertiary activities. Except as provided

¹Although there are no administrative rulings concerning the significant expansion exception, the Service recently raised an I.R.C. § 43 issue in [REDACTED] Corporation, f.k.a. [REDACTED] Corporation and Affiliates, Docket No. [REDACTED].

in regulations, a project will not be considered as substantially expanded to the extent it affects acreage to which an EOR method has previously been applied.

Informal Senate Report on S. 3209, Vol. 136 Congressional Record S15629, S15679-S15683, Oct. 18, 1990 (Emphasis added). The legislative history clarifies that Congress did not consider a project substantially expanded to the extent that the project is on acreage already involved in a pre-existing project.

The regulations are consistent with this same-acreage notion. In particular, the preamble to the Notice of Proposed Rulemaking for Treas. Reg. § 1.43-2 states that:

The legislative history provides that a significant expansion of a project is to be treated as a new project and states that a project is considered significantly expanded if it affects acreage substantially unaffected by the project's previously implemented tertiary activities. 101 Cong. Rec. S15675 (October 18, 1990). Section 1.43-2(d)(1)(i) incorporates this rule. The Secretary is permitted to expand the category of significant expansion by regulations. Id. Pursuant to this grant of authority, the proposed regulations treat two additional types of expansions as significant expansions. First, the expansion of a project to a reservoir previously unaffected by the project constitutes a significant expansion. For example, the application of a tertiary recovery method to a reservoir at 4,000 feet constitutes a separate project from a previous tertiary recovery project on the same acreage in a separate reservoir at 10,000 feet. Second, a project affecting a reservoir that was previously affected by a tertiary method constitutes a significant expansion if the prior method has been terminated for at least 36 months. Neither a change in tertiary recovery method nor a more intensive application of a method constitutes a significant expansion.

The Service took a similar approach in drafting the final regulations. Specifically, the preamble to the Final Regulations for Treas. Reg. § 1.43-2 states that:

The proposed regulations provide that a project begun on January 1, 1991, is considered significantly expanded if it affects substantially unaffected

acreage or a previously unaffected reservoir. Thus, under the proposed regulations, a lateral expansion would qualify for the credit; however, a vertical expansion would not qualify unless it affects a previously unaffected reservoir.

Commentators suggest that in lieu of the requirement that a significant expansion must affect substantially unaffected acreage or a previously unaffected reservoir, a project should be considered significantly expanded if it affects previously unaffected reservoir volume. Commentators indicate that the term "reservoir volume" more realistically reflects the three-dimensional concept petroleum engineers use in measuring reserves and the ultimate recovery of oil in place.

The final regulations reflect the comments and provide that a project is significantly expanded after December 31, 1990, if it affects reservoir volume that was substantially unaffected by a project begun before January 1, 1991.

Therefore, the Service combined the "new reservoir" regulatory exception and the "substantially unaffected acreage" statutory exception into one exception -- the "substantially unaffected reservoir volume" exception. In doing so, the Service preserved Congressional intent to exclude acreage already included in a project, even if a portion of such acreage is not yet "heated up," as in this case.

Accordingly, we agree that [REDACTED] has not satisfied the "substantially unaffected reservoir volume" requirement of Treas. Reg. § 1.43-2(d)(2). On that basis alone, the I.R.C. § 43 credits for the projects at issue should be denied.

Change in Tertiary Recovery Method:

The taxpayer also has not satisfied the "change in tertiary recovery method" requirement of Treas. Reg. § 1.43-2(d)(4). As noted, some of the claims involve a change from cyclical steam flooding to continuous steam flooding for pre-existing projects which have not been terminated for more than 36 months. Thus, a question arises as to the treatment of such claims.

Treas. Reg. § 1.43-2(d)(4) provides that:

If the application of a tertiary recovery method ... [for a pre-existing] enhanced oil recovery project ... has not been terminated for more than 36 months, a taxpayer may request a private letter ruling ... [as to] whether the application of a different tertiary recovery method ... after December 31, 1990, that does not affect reservoir volume substantially unaffected by the previous tertiary recovery method, is treated as a significant expansion.

For this purpose, all of the facts and circumstances determine whether a change in tertiary recovery method is treated as a significant expansion. *Id.* Thus, a taxpayer is not entitled to an I.R.C. § 43 credit for a project subject to a change in tertiary method unless the taxpayer receives a favorable private letter ruling.

[REDACTED] never requested a private letter ruling on this issue. Therefore, the taxpayer is not entitled to the claimed credits for these projects based on a change in tertiary recovery method.

Certification Requirements:

The taxpayer also does not qualify for the I.R.C. § 43 credits from a certification standpoint. To qualify for the credit, a project must meet the certification requirements of I.R.C. § 43(c)(2)(B) and Treas. Reg. § 1.43-3. Specifically, a taxpayer must provide two separate certifications: a petroleum engineer's certification, as required by Treas. Reg. § 1.43-3(a), and an operator's continued certification of a project, as required by Treas. Reg. § 1.43-3(b). As noted, in [REDACTED] [REDACTED] filed both its petroleum engineer's certifications relating to the [REDACTED] projects and its operator's continued certifications for [REDACTED] through [REDACTED]. In this case, the petroleum engineer's certifications are problematic.²

You have provided us with a memorandum (attached) prepared by [REDACTED], Petroleum Engineer, Petroleum Industry Program, concerning the adequacy of [REDACTED]'s certifications for the [REDACTED]

²The Examination Team has determined that [REDACTED]'s operator's continued certifications for [REDACTED] through [REDACTED] are adequate. However, the Examination Team notes that the taxpayer may need to resubmit the certifications if any of its petroleum engineer's certifications are modified, especially as to project implementation.

projects in its [REDACTED] tax year. In his memorandum, [REDACTED] concludes that [REDACTED]'s petroleum engineer's certifications do not satisfy the substantiation requirements of Treas. Reg. § 1.43-3. We concur.

Specifically, [REDACTED] concludes that [REDACTED] has not satisfied the "content of certification" requirements of Treas. Reg. § 1.43-3(a)(3). In particular, [REDACTED] has not met Treas. Reg. § 1.43-3(a)(3)(i)(C)(1), which requires a "description of the implementation and operation of the project sufficient to establish that it is implemented and operated in accordance with sound engineering practices." As noted above, in this regard [REDACTED] merely stated that: (1) the tertiary recovery method is a continuous steam drive; (2) the first injection of steam occurred on [REDACTED]; (3) the project is a significant expansion of a prior project in that it involves reservoir volume substantially unaffected by previous tertiary activity; and (4) the implementation of the project consists of the continuous injection of steam into approximately [REDACTED] patterns in the relevant reservoir within a certain area's physical limits.

According to [REDACTED], [REDACTED] should have provided additional information, including descriptions as to:

- (1) the previous tertiary activity within the project area and its status as of [REDACTED];
- (2) specific physical activities (e.g., increasing injection rates, drilling of new wells, construction of steam generators) which constitute the "significant expansion project" (and relevant dates thereof);
- (3) how the implementation of the "significant expansion project" differs from the continued implementation of the previous tertiary activity within the project area;
- (4) the recovery mechanisms or operating procedures by which the "significant expansion project" will affect previously unaffected reservoir volume;
- (5) how the implementation of the "significant expansion project," as opposed to the continuation of the previous tertiary activity, represents sound engineering practices -- i.e., will implementation of the "significant expansion project" result in the recovery of more crude oil than the continuation of the previous tertiary

activity for purposes of
Treas. Reg. § 1.43-3(i)(D)(1) and (2), discussed
below.

[REDACTED] also notes that the certification should have included the date of the first injection into the reservoir, as required under Treas. Reg. § 1.43-3(a)(3)(i)(C)(3).

As noted, the certification furnished data on reserve estimates and provided a production history and forecast. However, this information does not establish if the "significant expansion project" will result in the recovery of more crude oil than that recoverable from continuation of the previous tertiary activity, as required under Treas. Reg. § 1.43-3(a)(3)(i)(D)(1) and (2). The mere acceleration of the recovery of crude oil is not considered the application of a method that can reasonably be expected to result in more than an insignificant increase in the amount of crude oil that ultimately will be recovered. Treas. Reg. § 1.43-2(b).

Importantly, the certifications do not provide an adequate delineation of the reservoir, or portion of the reservoir, from which the ultimate recovery of crude oil is expected to be increased as a result of the implementation and operation of the project, as required by Treas. Reg. § 1.43-3(a)(3)(i)(D)(3). The certifications simply state that the project implementation consists of the continuous injection of steam into approximately 25 patterns in the relevant reservoir within a specific area's physical limits. In fact, an area map indicates that the [REDACTED] injection patterns and the "project area" are identical.

Finally, Treas. Reg. § 1.43-3(a)(3)(ii) requires that the petroleum engineer's certification contain an adequate delineation of the reservoir volume affected by the previously implemented project. The certifications do not. Moreover, significant reservoir volume may have been affected prior to [REDACTED], given that one project area produced a total of [REDACTED] barrels of oil as of [REDACTED].

We agree with [REDACTED]'s assessment of [REDACTED]'s petroleum engineer's certifications. Accordingly, we conclude that the taxpayer has not satisfied the certification requirements under Treas. Reg. § 1.43-3 for purposes of claiming the Enhanced Oil Recovery credits under I.R.C. § 43 for the projects at issue. Thus, on this alternative basis, the credits can be denied accordingly.

CONCLUSION

As reflected above, Associate Area Counsel (LMSB) concludes that the taxpayer has met neither the technical requirements nor the certification requirements for purposes of claiming the Enhanced Oil Recovery credits under I.R.C. § 43 for the projects at issue. Therefore, we agree that the claimed credits should be disallowed in full. The National Office has reviewed this advisory.

If you have any questions regarding this matter, please contact [REDACTED] the attorney responsible for this matter, directly at [REDACTED] ext. [REDACTED].

By: _____
[REDACTED]
Acting Associate Area Counsel

Attachment: As stated